

## ABSTRACT OF THE DISCLOSURE

A catheter with a small optical fiber or bundle of fibers includes a scanning mechanism constructed with the use of any vibration capable component. Magnetic, piezoelectric or other mechanisms are used to vibrate the end of the fiber and thus create  
5 a scanning effect which extends the field of view. This configuration can be used in a catheter with a relatively small diameter. A glass lens or lenses placed in front of the fiber focuses and magnifies the image. A CCD, CMOS, or photodiode camera at the proximal end of the fiber captures the image and transfers it to a computer or processor. A light splitter coupled to a light source provides light through an illumination fiber. The  
10 resulting vision catheter is relatively inexpensive and disposable.